

# ***PROHIBITED AND RESTRICTED CHEMICAL LIST***

## **Introduction**

After incidents of laboratory chemical contamination at several schools, DCPS, The American Association for the Advancement of Science (AAAS) and DC Fire and Emergency Management Services developed an aggressive program for chemical control to eliminate student and staff exposure to potential hazardous chemicals. Based upon this program, all principals are required to conduct a complete yearly inventory of all chemicals located at each school building to identify for the removal and disposal of any prohibited/banned chemicals.

- ***Prohibited chemicals*** are those that pose an inherent, immediate, and potentially life-threatening risk, injury, or impairment due to toxicity or other chemical properties to students, staff, or other occupants of the school. These chemicals are prohibited from use and/or storage at the school, and the school is prohibited from purchasing or accepting donations of such chemicals.
- ***Restricted chemicals*** are chemicals that are restricted by use and/or quantities. If restricted chemicals are present at the school, each storage location must be addressed in the school's written emergency plan. Also, plan maps must clearly denote the storage locations of these chemicals.
- ***Restricted chemicals—demonstration use only*** are a subclass in the Restricted chemicals list that are limited to instructor demonstration. Students may not participate in handling or preparation of restricted chemicals as part of a demonstration. If Restricted chemicals—demonstration use only are present at the school, each storage location must be addressed in the school's written emergency plan.

## School Emergency Response Plan and Management Guide

### Prohibited and Restricted Chemical List

Following is a table of chemicals that are Prohibited—banned, Restricted—academic curriculum use, and Restricted—demonstration use only.

<b>Prohibited Chemicals—Banned</b>	
2-Butanol	Chloroacetylene
Acetal	ChloroformChloropicrin
Acetaldehyde	Chloroprene
Acetyl Chloride	Chlorotrifluoroethylene
Acetyl Nitrate	Chromium (IC) Chloride
Acrolein	Chromium (Powder)
Acrylic Acid	Chromyl Chloride
Acrylonitrile	Cobalt (Powder)
Alcohols (Allylic, Benzylic)	Colchicine
Alidyy-Substituted Cycloaliphatics	Copper Acetylde
Aluminum Hydrophosphide	Cumene
Aluminum Phosphide	Cycloheptanone
Amatol	Cyclohexanoi
Ammonal	Diacetylene
Ammonium Bromate	Diazidoethane
Ammonium Chlorate	Diazodinitrophenol
Ammonium Hexanitrocobaltate	Diazomethane
Ammonium Nitrite	Dicyciopentadiene
Ammonium Perchlorate	Dicsopropyl Ether
Ammonium Periodate	Dinitrophenol
Ammonium Permanganate	Dioxane
Ammonium Tetraperoxychromate	Dipentaerythritol Hexanitrate
Antimony Campounds Arsenic and Arsenic Compound	Disulfur Dinitride
Azides	Divinyl Acetylene
Azidocarbonyl Guanidine	Divinyl Ether
Barium	Ethyl Ether
Barium Chlorate	Ethyl Nitrite
Barium Oxide (Anhydrous)	Ethylene Glycol Dimethyl
Barium Peroxide	Ether (Glyme)
Benzene	Ethylene Glycol Dinitrate
Benzene Diazonium Chloride	Ethylene Oxide
Benzotriazole	Formaldehyde
Benzoyl Peroxide	Furan
Benzyl Alcohol	Glycol Dinitrate
Bismuth Nitrate	Glycol Monolactate Trinitrate
Borane, Boranes, Diboranes	Grignard Reagents (Ether Solvents)
Boron Tribromide	Guanyl Nitrosaminoguanyl Hydrazine
Boron Trifluoride	Hexyl Alcohol
Bromine Pentafluoride	HMX
Bromine Trifluoride	Hydrazoic Acid
Butadiene	Hydrofloric Acid
Butenetroil Trinitrate	Hydrogen Peroxide (~30%)
Cadmium and Cadmium Compounds	Hydrogen Peroxide (60%)
Calcium Nitrate. Anhydrous	Hydrogen Sulfide
Calcium Permanganate	Isopropyl Ether
Carbon Tetrachloride	Lead Arsenate
Chloral Hydrate	Lead Dinitride (Azide)
Chlorine	Lead Dinitrorescorcinat (Styphnate)
Chlorine Dioxide	Lead Dioxide. Brown
Chlorine Trifluoride	Lead Mononitrorescorcinat
Chlorine Trioxide	Lithium Nitrate

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Cyclopentene	Lithium Nitride
<b>Prohibited Chemicals—Banned (continued)</b>	
Lithium Peroxide	Sodium Chlorite
Magnesium (except Mg ribbon & turnings) Magnesium Peroxide	Sodium Cyanide
Mannitol Hexanitrate	Sodium Dithionite
Mercury and Mercury Compounds	Sodium Hydrosulfite
Methyl Acetylene	Sodium Methylate
Methyl Cyclopentane	Sodium Perborate
Methyl Isocyanate	Sodium Perchlorate
Methyl Methacrylate, Monomer	Sodium Permanganate
Nessler's Reagent (Mercury Compound)	Sodium Peroxide
Nicotine	Strontium Perchlorate
Nitroglycerin	Styrene Monomer
Nitrosoguanidine	Sulfur Trioxide
Osmic Acid	Sulfuryl Chloride (Sulfonyl)
Osmium Tetroxide	Sulfuryl Chloride Fluoride
O-Toluidine	T-Butyl Hypochlorite
Pentaerythritol Tetranitrate (PETN)	Tetrafluoroethylene
Perchloric Acid	Tetrahydrofuran
Phenol	Tetrahydronaphthalene
Phenyl Thiourea	Tetranitromethane
Phosphorus Halides and Oxides	Tetraselenium
Phosphorus, Phosphides	Tetranitride
Phthalk Anhydride, Picrates, Picramide, and Picryl Compounds.	Tatrazene
Picric Acid	Tetryl
P-Nitrophenol	Thallium Nitride
Polyvinyl Nitrate	Thermit
Potassium Amide	Themite Igniting Mixture Thiocarbonyl
Potassium Cyanide KCN	Tetrachloride
Potassium Dinitrobenzofuroxan	Thionyl Chloride
Potassium Nitrite	Titanium (Powder)
Potassium Perchlorate	Titanium Tetrachloride
Potassium Periodate	Triethyl Aluminum
Potassium Peroxide	Triethyl Arsine
Potassium Superoxide	Triisobutyl Aluminum
RDX	Trimethyl Aluminum
Sec-Butyl Alcohol (2-Butanol)	Ttinitroanisole
Silanes and Chlorosilanes	Trinitrobenzene
Silicon Tetrachloride	Trinitrobenzoic Acid
Silver Acetylide	Trinitronaphthalene
Silver Cyanide	TrInitroresorcinol
Silver Dinitrorescorcinatate (Styphnate)	Trinitrotoluene
Silver Fulminate (Cyanate)	Trisilyl Arsine
Silver Nitride	Uranium Componds
Silver Oxalate	Uranyl Acetate
Silver Tetrazene	Uranyl Nitrate
Sodamide	Urea Nitrate
Sodium Amide	Vinyl Acetate
Sodium Arsenate	Vinyl Acetylene
Sodium Arsenite	Vinyl Chloride
Sodium Chlorate	Vinyl Ethers
	Vinylidene Chloride
	Zinc Peroxide

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### Prohibited and Restricted Chemical List

Restricted Chemicals—Academic Curriculum Use	
2-Butanone	Benzoic Acid
Acetamide	Benzyl Chloride
Acetanilide	Benzyl Sodium
Acetic Acid	Benzylamine
Acetic Anhydride	Beryllium Tetrahydroborate
Acetone	Biphenyl (Diphenyl)
Acetyl Halides	Bismuth Pentafluoride
Acetylcholine Bromide	Boric Acid
Acridine Orange UNDEFINED	Boron Bromodiodide
Adipoyl Chloride	Boron Oibromiodide
Alizarin Red UNDEFINED	Boron Phosphide
Alkyl Aluminum Chloride	Boron Trichloride
Aluminum Al	Bromine Monofluoride
Aluminum Acetate	Bromine Water
Aluminum Bromide	Bromobenzene
Aluminum Chloride, Hydrate	Bromodiethylaluminum
Aluminum Fluoride	Bromoform
Aluminum Hydroxide	Butanol (N-Butyl Alcohol)
Aluminum Nitrate	Butyric Acid
Aluminum Tetrahydroborate	Calcium (100 9 limit)
Ammonia, Anhydrous	Calcium Bromide
Ammonia, Liquid	Calcium Hypochlorite
Ammonium Acetate	Calcium Nitrate Tetrahydrate
Ammonium Bicarbonate	Calcium Phosphide
Ammonium Bichromate	Camphor
Ammonium Bromide	Carbon Disulfide
Ammonium Carbonate	Ceric (IV) Sulfate
Ammonium Chloride	Cesium Amide
Ammonium Chromate	Cesium Phosphide
Ammonium Fluoride	Chlorine Monofluoride
Ammonium Hydroxide	Chlorine Pentafluoride
Ammonium Iodide	Chloroacetic Acid
Ammonium Molybdate	Chloroacetyl Chloride
Ammonium Nitrate	Chlorobenzene
Ammonium Oxalate	Chlorodiisobutyl Aluminum
Ammonium Phosphate, Dibasic	Chlorophenylsulfocyanate
Ammonium Phosphate, Monobasic	Chromic Acid
Ammonium Sulfate	Chromium (IC) Nitrate
Ammonium Sulfide	Chromium Sulfate
Ammonium Tartrate	Chromium Trioxide
Ammonium Thiocyanate	Cobalt (ous) Nitrate
Amyl Acetate	Cupric Bromide, Anhydrous
Amyl Alcohol(N)	Cyclohexane
Aniline	Dichlorobenzene
Aniline Hydrochloride	Dichloroethane
Anisoyl Chloride	Dichloromethane
Barium Acetate	Diethyl Aluminum Chloride
Barium Carbide	Diethyl Zinc
Barium Chloride Hydrate	Diisopropyl Beryllium
Barium Nitrate	Dimethyl Magnesium
Benzaldehyde	Diphenyl Diisocyanate
Benzene Phosphorus Dichloride	Diphenylamine

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<b>Restricted Chemicals—Academic Curriculum Use (continued)</b>	
Ethanol C <sub>2</sub> H <sub>5</sub> OH	Methyl Magnesium Chloride
Ethyl Acetate	Methyl Magnesium Iodide
Ethyl Alcohol	Methylene Chloride
Ethyl Methacrylate	Naphthalene
Ethylene Dichloride	Naphthol-1
Ethylenediamine	N-Butyl Alcohol
Faa Solution UNDEFINED	N-Butyllithium
Fehlings Solution A UNDEFINED	Nickel Antimonide
Fehlings Solution B UNDEFINED	Nickel(II) Nitrate
Ferric Chloride. Anhydrous	Nickel(II) Sulfate
Ferric Nitrate	Nitric Acid
Fluorine Monoxide	Nitrobenzene
Fluorosulfonic Acid	Nitrogen
Formalin	Octyl Alcohol
Formic Acid	o-Dichlorobenzene
Gasoline UNDEFINED	Oxalic Acid. Hydrate
Glutaraldehyde	Oxygen
Gold Acetylde	p-Dichlorobenzene
Hematoxylin	Pentyl Alcohol (Amyl)
Heptane,	Petroleum Ether
Hexamethylene Diisocyanate	Phosphoric Acid
Hexamethylenediamine	Phthalic Acid
Hexane,	Polyphenyl Polymethylsiloxane
Hydriodic Acid	Polyvinyl Alcohol
Hydrobromic Acid	Potassium Bromate
Hydrochloric Acid	Potassium Chromate
Hydrogen Peroxide (30% or less)	Potassium Dichromate
Hydroquinone	Potassium Ferricyanide
Hydroxylamine	Potassium Ferrocyanide
Hydrochloride	Potassium Hydroxide
Iodine	Potassium Iodate KI <sub>3</sub>
Iodine Monochloride	Potassium Nitrate KN <sub>3</sub>
Iron	Potassium Permanganate
Isoamyl Alcohol	Potassium Persulfate
Isobutyl Alcohol	Potassium Sulfide
Isopentyl Alcohol	Propane
Isopropyl Alcohol	Propionic Acid
Kerosene UNDEFINED	Propyl Alcohol
lead Nitrate	Pyridine
Lead Oxide, Red	Pyrosulfuryl Chloride
Lead Peroxide (01)	Silver Nitrate
Lithium Amide	Silver Sulfate
Lithium Bromide LiBr	Sodium Bisulfite
Lithium Ferrosilicon	Sodium Chromate
Lithium Silicon	Sodium Cobaltinitrite
Lithium Sulfate	Sodium Dichromate, Hydrate 0
Lye	Sodium Fluoride
Magnesium (ribbon)	Sodium Hydroxide
Methyl Alcohol	Sodium Hypochlorite
Methyl Aluminum Sesquibromide	Sodium Iodate
Methyl Aluminum Sesquichloride	Sodium Iodide
Methyl Ethyl Ketone	Sodium Metabisulfite
Methyl Magnesium Bromide	Sodium Nitrate
	Sodium Nitrite

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<b>Restricted Chemicals—Academic Curriculum Use (continued)</b>	
Sodium Phosphate, Tribasic	Trichloroethylene
Sodium Potassium Alloy	Triethanolamine
Sodium Sulfide	Triethyl Stibine
Sodium Thiocyanate Sodium Thiosulfate	Trimethylpentane
Stannic Chloride	Tri-N-Butyl Aluminum
Strontium Nitrate	Trioctyl Aluminum
Sulfur Chloride	Triphenyl Tetrazolium
Sulfur Pentafluoride	Tripropyl Stibine
Sulfuric Acid «10%	Trisodium Phosphate
Sulfuric Acid (>10%)	Trivinyl Stibine
T -Butanol	Tungsten
Terpineol	Turpentine
Thiophosphoryl Chloride	Vanadium Trichloride
Tin	Xylene
Toluene	Zinc (Powder)
Toluene Diisocyanate	Zinc Acetylide
Toluidine Blue	Zinc Nitrate
Trichloroethane, 1,1,1-	Zinc Phosphide

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Restricted Chemicals—Demonstration Use Only	
Aluminum Chloride, Anhydrous	Diglyme
Ammonium Dichromate )	Dinitrophenylhydrazine
Ammonium Persulfate	Hydrides, BorohydridesI
Antimony Metal )	Hydrogen
Bromine Br <sub>2</sub>	Lithium
Calcium Carbide	Magnesium (turnings)
Chromium Oxide	Methyl Isobutyl Ketone (MIBK)
Collodion (100mlimit)	Pentane
Cyclohexanone	Phosphorus, Red (Amorphous)
Cyclohexene (100 mllimit)	Potassium
Cyclopentanone (100 mllimit)	(Potassium Chlorate Silver Oxide
Diethyl Ether	Sodium Na
	Wright's Stain (HG Containing) Undefined